Torres, Jose

From: Muhammadali Abbaszadeh < Muhammadali. Abbaszadeh@tceq.texas.gov>

Sent: Monday, March 28, 2016 5:41 PM

To: Torres, Jose

Cc: Dellinger, Philip; Lorrie Council; Dale Kohler **Subject:** RE: A Question Re Well Type Identification

Mr. Torres,

To further expand on my response I provided to you below, please note that the information I provided to you was based on the Class III well inventory that the TCEQ requires the companies provide each year as required under certain TCEQ UIC permits/rules. In this case, the injection and production wells are not distinguished separately. Although the subject information TCEQ receives does not distinguish between an injection or production well, the companies should have the information on which wells were used as a production or an injection well during production. With respect to your question regarding the individual well injection history, as well as individual well production history, I am not aware that such information is available at TCEQ.

Regards,

Muhammadali Abbaszadeh

From: Torres, Jose [mailto:Torres.Jose@epa.gov]

Sent: Monday, March 28, 2016 4:52 PM

To: Muhammadali Abbaszadeh < Muhammadali. Abbaszadeh @tceq.texas.gov >

Cc: Dellinger, Philip <dellinger.philip@epa.gov>; Lorrie Council <lorrie.council@tceq.texas.gov>

Subject: RE: A Question Re Well Type Identification

Thank you Mr. Muhammadali for your reply message, glad to know you were able to successfully complete your trip to Iran and back. Hope everyone in your family is doing fine.

Having worked extensively in waterflooding for enhanced oil recovery, I understand the value of the ability to learn about points and volumes of injection and production (which requires the positive identification of injection wells and production wells). Also, having determined beyond reasonable doubt that injection operations at KVD's PA-3 have caused the movement of mining solutions to flow beyond the Monitoring Well Ring (excursions), I was hoping that we might be able to better understand how the injection/production process actually worked there, in order to take measures towards avoiding future repeats of what we have seen at PA-3. That is the main reason for my March 24, 2016 question to you.

Without being able to positively identify the points of injection and production, as well as the volumes involved (the field injection/production history), no meaningful engineering analysis of the operations is possible. Your reply mail suggests that this analysis can not be started by looking at the well listings available from the operator's (URI's) quarterly reports (sample list previously sent to you). I am exploring possible alternate routes to the answers.

Is it possible that there is currently in TCEQ's records field information (preferably in an electronic format) which the Commission may have requested and reviewed as part of its operations monitoring/oversight functions, information that would allow the review/evaluation of individual well injection history, as well as individual well production history in say, a given wellfield? If that is the case, do you think that you might be able to send us via e-mail, or other available means, that type of information for Wellfield 9 and Wellfield 10 at PA-3, as a starting point?.

Thank you in advance for your cooperation in this matter. Have a great rest of the week. Sincerely,

José Eduardo Torres - 6WQ TCEQ Delegated UIC Program Manager Ground Water/UIC Section EPA, Region 6 (214) 665-8092

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From: Muhammadali Abbaszadeh [mailto:Muhammadali.Abbaszadeh@tceq.texas.gov]

Sent: Monday, March 28, 2016 1:21 PM **To:** Torres, Jose < Torres.Jose@epa.gov>

Cc: Dellinger, Philip < dellinger.philip@epa.gov > **Subject:** RE: A Question Re Well Type Identification

Good afternoon

Mr. Torres,

I hope all is well with you and the family. I came back to work today from a trip to Iran. There is no key to distinguish a production well from an injection well. The companies report these wells as production/injection wells since during production and other aspects of the operations a production well can be used as an injection well and vice versa. I hope this answers your question. Otherwise, please let me know and I will provide additional explanation.

Muhammadali Abbaszadeh, Health Physicist, Work Leader Radioactive Materials Compliance Team Critical Infrastructure Division Homeland Security Section Office of Compliance and Enforcement Texas Commission on Environmental Quality muhammadali.abbaszadeh@tceq.texas.gov

Office: (512) 239-6078 Mobile: 512-438-9812

From: Torres, Jose [mailto:Torres.Jose@epa.gov]

Sent: Thursday, March 24, 2016 2:02 PM

To: Muhammadali Abbaszadeh < Muhammadali. Abbaszadeh@tceq.texas.gov >

Cc: Dellinger, Philip < dellinger.philip@epa.gov > **Subject:** A Question Re Well Type Identification

Hello Mr. Muhammadali:

Hope this one finds you doing well. The attached Table is from UIC's Annual Report to TCEQ on operations at the KVD mining site. It is part of "Appendix E", "Updated Inventory of all Injection, Production, Baseline and Monitor Wells". In this Table, under the header ATTACHMENT E, one reads "URI Kingsville Dome Production/Injection Wells". When I

looked at the list of wells under the column header "PA3 Hole Number", I was unable to make out which wells are production wells and which are injection wells. Could you please provide a key, if there is one, for distinguishing in this Table which well is which?. Your assistance will be greatly appreciated. Thanks,

José Eduardo Torres - 6WQ-SG TCEQ Delegated UIC Program Manager Ground Water/UIC Section EPA Region 6 (214) 665-8092

ATTACHMENT E
URI Kingsvile Dome Production / Injection Wells

PA1 Hole Number	Wellfield#	PA2 Hole Number	Wellfield#	PA3 Hole Number	Wellfield #
260	WF-2	5150	WF-5	16033	WF-16
261	WF-2	5154	WF-5	16034	WF-16
262	WF-2	5301	WF-5	16035	WF-16
263	WF-2	5302	WF-5	16000A	WF-16
264	WF-2	5303	WF-5	16002A	WF-16
265	WF-2	5304	WF-5	16005B	WF-16
266	WF-2	5305	WF-5	16029A	WF-16
267	WF-2	5306	WF-5	16029A	WF-16
268	WF-2	5307 *	WF-5	16001	WF-16
269	WF-2	5308	WF-5	16003	WF-16
270	WF-2	5309	WF-5	16007	WF-16
271	WF-2	5310	WF-5	16008	WF-16
272	WF-2	5311	WF-5	16011	WF-16
273	WF-2	5312	WF-5	16013	WF-16
274	WF-2	5313	WF-5	16014	WF-16
275	WF-2	5315	WF-5	16015	WF-16
276	WF-2	5330	WF-5	16017	WF-16
277	WF-2	5331	WF-5	16020	WF-16
278	WF-2	5350	WF-5	16021	WF-18
279	WF-2	5351	WF-5	16022	WF-18
301	WF-3	5352	WF-5	16024	WF-18
302	WF-3	5353	WF-5	16030	WF-16
303	WF-3	5354	WF-5	16031	WF-16
304	WF-3	5355	WF-5	16032A	WF-16
305	WF-3	5356	WF-5	16039	WF-16
306	WF-3	5357	WF-5	16040	WF-16
307	WF-3	5358	WF-5	16044	WF-16
308	WF-3	5361	WF-5	16046	WF-16
309	WF-3	5362	WF-5	16049	WF-16
310	WF-3	5363	WF-5	16050	WF-16
311	WF-3	5364	WF-5	16056	WF-16
312	WF-3	5365	WF-5	16057	WF-16
313	WF-3	5370	WF-5	16061	WF-16
314	WF-3	5371	WF-5	16062	WF-16
315	WF-3	5372	WF-5	16063	WF-16
316	WF-3	5373	WF-5	16043a	WF-16
317	WF-3	5374	WF-5	16051a	WF-16
318	WF-3	5375	WF-5	16037	WF-16
319	WF-3	5376	WF-5	16041	WF-16
320	WF-3	5377	WF-5	16042	WF-16

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